



**METROPOLITAN WATER POLLUTION ABATEMENT
ADVISORY COMMITTEE**

MEETING SUMMARY

Mercer Island

Community Center

Room 104

Wednesday, January 28, 2015

Start 10:00

Meeting adjourned

11:40 am

1. MWPAAC Chair's Report – Scott Thomasson, Chair

- a. Welcome and Introductions
- b. Quorum
- c. Approval of January meeting summary (action item)

2. Subcommittee Reports

- **Engineering and Planning Subcommittee**
 - West Point NPDES Permits
 - 2015 work program
 - RWSP policies review (I&I and Treatment policies)
- **Rates and Finance Subcommittee**
 - Sewer rate calendar of discussions for 2015
 - 2015-2016 Operating Fund summary
 - 2014 revenue & expense projections

3. Wastewater Treatment Division Director's Report- Pam Elardo, P.E., Director, Wastewater Treatment Division

4. Officer Elections

- a. Vice-Chair of the Committee- Judi Gladstone was voted unanimously to continue as Vice-Chair.
- b. Engineering & Planning Subcommittee Chair- Lisa Tobin was voted unanimously to continue as Chair
- c. Advisory Subcommittee on the Sewerage Disposal Agreements Chair- Alison Bennett was voted unanimously to continue as Chair

5. State of the Utility, Pam Elardo, P.E., WTD Director

Accomplishments in 2014

Plant Operations

- The division completed negotiations with the state Department of Ecology to renew the National Pollutant Discharge Elimination System (NPDES) Permit for the West Point Treatment Plant. Permit conditions retain achievable effluent limits, avoid significant additional sampling costs, protect against laboratory violation penalties, and provide opportunities to negotiate on future policy changes. The renewed permit is expected to be issued in early 2015.
- The Wastewater Treatment Division earned several Peak Performance Awards from the National Association of Clean Water Agencies, or NACWA, for outstanding compliance with its NPDES effluent limits. To date, South Treatment Plant has attained 16 years of 100 percent permit compliance with its effluent limits, and West Point Treatment Plant has attained 12 years of compliance. King County's Vashon and Carnation treatment plants received Gold awards from NACWA for 100 percent compliance for effluent limits within the past calendar year. The Brightwater Treatment Plant, which came online in 2011, earned its first ever Gold award.
- The division successfully completed the West Point Screenings Project to comply with Department of Ecology's stricter screening rules. Plant employees worked closely with construction and project management teams to coordinate all the activities necessary to replace six bar screens and add new conveyors and washer/compactors, all while maintaining round-the-clock operation.
- Visitors to Discovery Park's beach and lighthouse noticed increased security patrols and stricter parking enforcement last summer. The measures are part of a pilot program launched by King County's Wastewater Treatment Division and Seattle Parks and Recreation to bolster security at the West Point Treatment Plant while preserving access to the park's natural areas. The division will continue to carry out this trial enforcement period through spring 2015.
- WTD worked with Seattle Public Utilities to pilot technology to enable the sharing of real time operational data. If the pilot succeeds, employees from both agencies will take the next step to consider how to use the shared data in control strategies to optimize flow management within the two utilities' service area.
- One-hundred percent of Carnation Treatment Plant's effluent was sent to Chinook Bend Wetland as Reclaimed Water.

Capital Improvements/Project Planning and Delivery

- Division planning staff completed the annual report on the Regional Wastewater Services Plan.
- WTD completed construction on the King County Kirkland Pump Station, providing necessary infrastructure critical to regional prosperity and upgrades to a growing eastside community.
- Employees completed inspection of more than 85,000 feet of pipe and tunnels as well as 276 roofs.

- The division continues meeting its Consent Decree compliance schedule requirements and project milestones for its Combined Sewer Overflow Control Program.
- WTD successfully completed a 10-year eelgrass restoration and monitoring project to preserve critical habitat impacted by construction of the Brightwater marine outfall off Point Wells. The work, which was required by the Washington State Department of Natural Resources, is bringing notable environmental benefits as eelgrass provides critical habitat for forage fish, salmon and even Orca whales.
- The division also completed a project required by the U.S. Army Corps of Engineers to restore wetlands at the North Kenmore Portal that were impacted by Brightwater tunnel construction.
- The division invested \$148.3 million in dozens of capital improvement projects to add system capacity, replace or rehabilitate aging facilities, and enable efficient operations. Projects in planning and design include:
 - East County WTD Fleet Repair & Maintenance Facility
 - Lake Hills and NW Lake Sammamish Interceptor
 - North Mercer Island and Enatai Interceptors
 - Georgetown Wet Weather Treatment Station
 - Green stormwater infrastructure planning to control combined sewer overflows at 11th Ave NW, University, and West Michigan/Terminal 115
- Major projects with completed design or starting construction:
 - Fremont Siphon
 - North Creek Interceptor
 - South Plant Raw Sewage Pumps and Drives
 - West Point Digester Floating Lids Repair
 - West Point Raw Sewage Pump Engine Emissions
 - Combined sewer overflow control projects at Murray, Barton, South Magnolia and North Beach
- Major projects reaching substantial completion or final completion
 - Interbay Pump Station upgrade
 - West Point Treatment Plant Influent Screens
 - Kirkland Pump Station upgrade
 - Kent/Auburn Conveyance Improvements
 - Interbay Forcemain emergency repair
 - Ballard Siphon

Finance, Administration and Policy

- The division's 2015-16 rate proposal was adopted by the Metropolitan King County Council in June, bringing the monthly wholesale sewer rate from \$39.79 to \$42.03 through the end of 2016. The rate is **62 cents less** than what was adopted in the 2014 County budget, largely because of "best government" practices that include employee-identified efficiencies that directly saved ratepayers more than \$430,000, knocking a full percentage point off the proposed rate increase for the two-year period.

- WTD refinanced \$271 million in sewer revenue bonds, which will ultimately save the utility's ratepayers \$37.3 million. Since 2000, various refinancings of King County's bonds have saved the utility almost \$300 million.
- Moody's and Standard & Poor's affirmed their respective ratings of WTD's sewer revenue bonds at Aa2 and AA+, citing the utility's strong management practices, consistent financial performance and bright regional economic outlook.

Education, Outreach and Community Services

- WTD's Community Services staff responded to 1,000 individual inquiries in 2014, primarily in support of the Wastewater Treatment Division's (WTD) capital projects. The team's average time to fully respond to those inquiries was **less than one day** (.76 days) – faster than 2013 record of 2.47 days. Community Services staff also sponsored nearly 300 activities to share information about WTD and its work with more than 160,000 community members.
- The division launched multiple educational campaigns that teach people about the benefits of recycling biosolids (Loop® videos), the importance of controlling combined sewer overflows (Protecting Our Waters: Doing Our Part on Rainy Days), and the real costs of flushing trash (Flushing Awesome).
- The Environmental Planning team earned the John D. Spellman Award for exemplary achievement in historic preservation on May 15, 2014. The award, presented by the King County Executive's Office, acknowledged the Environmental Planning Team's effort to consider cultural resources during project planning and implementing the Executive Procedures for the Treatment of Cultural Resources.
- The Brightwater Education Center experienced substantial growth during 2014 with 181 event rentals, including three weddings! The center's availability as a potential wedding venue received international media coverage last spring, with the media highlighting the Brightwater's state-of-the-art treatment plant (with zero odor) and WTD's commitment to protecting public health and the environment through community-based education.
- The Industrial Waste Pretreatment Program studied the impact of the expanding winery sector within the Brightwater service area, capturing BOD loadings and installing equipment to measure the pH in an area of high concentration of small wineries. In addition to sampling, staff met with industry representatives to discuss the development of discharge guidelines for the wine industry sector.

Environmental Cleanup and Pollution Control

- After nearly 15 years of study and early action cleanups, the U.S. Environmental Protection Agency issued a decision on the Lower Duwamish Superfund cleanup that protects human health and the environment to the greatest extent possible, working in collaboration with EPA, the State Department of Ecology, community groups, and others. WTD will continue to study the decision to better understand its potential

implications for the agency, and will also participate with other potentially liable parties in an allocation process.

- In 2014, the division supported Executive Constantine's formation of a partnership with the City of Seattle, the Bullitt Foundation and the University of Washington Green Futures Lab to develop a long-term strategy to improve the environmental and economic health of the region by leading a strategy to improve conditions around the watershed that surrounds the Green and Duwamish rivers.
- WTD awarded more than \$102,000 in Lower Duwamish Green Grants to fund grassroots environmental projects in the Lower Duwamish Valley that align with King County's goals to control combined sewer overflows (CSO), improve air quality, curb new and ongoing sources of pollution in the Duwamish, and make improvements to water quality. The grants are part of a settlement agreement with Puget Sound Clean Air Agency (PSCAA) to resolve issues stemming from the West Point treatment plant's raw sewage pump engines.
- WTD partnered with Seattle Public Utilities on the RainWise Program, which offers rebates to cover up to 100 percent of the cost to install rain gardens on private property in eligible combined sewer overflow (CSO) basins.

Resource Recovery, Energy and Sustainability

- The division completed its first year supplying recycled water to Willows Run Golf Course for all their irrigation needs. WTD continued to provide recycled water service from South plant to irrigation and commercial users.
- WTD's Technology Assessment Program reviewed 17 new technologies with the potential to help reduce costs over time, prepare to meet future challenges or improve our treatment process. WTD employees further enhanced WTD's leadership role in the Water Environment Federation/Water Environment Research Federation's Leaders Innovation Forum for Technology (LIFT). The program's purpose is to accelerate innovation through collaborative technology evaluation by public wastewater utilities.
- As a result of WTD's efforts toward energy efficiency, renewable energy production, and Loop carbon & nutrient recycling, data show that WTD transitioned to become carbon neutral in our operations in 2013. Data being analyzed for 2014
- WTD implemented its first round of energy efficiency priority investments of \$438,000. The division also received grants totaling over \$376,032, and finalized additional grant commitments for \$439,151 for capital projects incorporating energy efficiency.
- WTD completed the process to certify South's Plant's pipeline quality scrubbed biogas as a renewable resource, qualifying to sell Renewable Identification Numbers, or RINs, to promote renewable transportation fuel.
- The division recycled 100 percent of its biosolids for delivery to existing agriculture, forestry and composting customers in western and eastern Washington.

- WTD worked with the National Biosolids Management Association to develop amicus briefs in support of Ecology’s appeal of the Wahkiakum County decision to ban land application of biosolids. A state Court of Appeals sided with Ecology and overturned the Wahkiakum County’s biosolids ban. This decision gives King County and other biosolids producers the certainty that Ecology can permit and regulate biosolids projects anywhere in the state.
- The division continued its work with UW scientists on research designed to diversify the biosolids program:
 - TransAlta (Centralia mine reclamation) – Phases I and II of greenhouse research tested various mixes of biosolids, topsoil, ash and waste wood for their effectiveness in growing Douglas-fir.
 - Eastside Forestry – Research plots were installed in Kittitas County in cooperation with the state DNR to test the effects of biosolids and selective thinning on the health and insect resistance of eastside forests.
 - Green Stormwater Infrastructure – in cooperation with DCWater, designed Phase II of greenhouse studies to optimize performance of various soil mixes for use in stormwater bioretention facilities. Staff also provided comments to influence and improve stormwater regulations at both the county and state levels.

Continuous Improvement

- WTD celebrated the second successful year of the Bright Ideas program, which creates a space for continuous improvement, employee engagement, and efficiencies that save our ratepayers money. Over half of the 168 ideas submitted over the last year were approved. The division’s focus on increasing efficiencies through Bright Ideas and Lean programs will be a priority in 2015 and beyond.
- The Project Planning and Delivery Team developed and launched a new program to review capital project cash flow and schedule projections, increasing understanding of project cash flow and schedule while highlighting opportunities for improvement. The new program also puts WTD in a better position to meet cash flow and schedule targets.
- The division initiated the WTD Operator-in-Training Pilot Program to recruit and train the next generation of clean-water employees, and developed options for contingent staffing to create training positions for hard –to-fill technical positions.

Safety and Training

- A four-day training exercise at King County’s Brightwater Treatment Plant provided local firefighters and operations staff with valuable hands-on technical rescue training. The training focused on technical rescue techniques that require saving life or property in potentially hazardous areas such as confined spaces or damaged buildings.

- Operations staff created an Electrical Power Sources Booklet (3 x 5) so employees can easily locate electrical power sources. Staff also continued development of the SafetySWP Application so employee Subject matter Experts (SME) can develop consistent Lockout Tagout Hazardous Energy Control Procedures.

Awards

- West Point Treatment Plant, 12th Peak Performance Platinum Award (for 2013 calendar year); National Association of Clean Water Agencies (NACWA)
- South Treatment Plant, 16h Peak Performance Platinum Award (for 2013 calendar year); NACWA
- Carnation Treatment Plant, Outstanding Wastewater Treatment Plant Award for 2013, NACWA
- Brightwater Treatment Plant, Peak Performance Gold Award (for 2013 calendar year); NACWA
- Brightwater Treatment Plant, Peak Performance Gold Award (for 2013 calendar year); NACWA
- Vashon Treatment Plant, Peak Performance Gold Award (for 2013 calendar year); NACWA
- WTD, 2014 Best Diversity Company in Engineering & Information Technology, Diversity / Careers Magazine
- Environmental & Community Services Section, John D. Spellman Historic Preservation Award, Preservation Planning, King County Executive
- Stanley Caberto, Master Industrial Mechanic, WEF Operations Ingenuity Award, Water Environment Federation (WEF)
- Loop videos, Resource Recovery section, Best in Pride Award for 2014, NW Biosolids Management Association

What's Ahead for 2015

Plant Operations

- WTD will negotiate with the state Department of Ecology on the South Treatment Plant's National Pollutant Discharge Elimination System (NPDES) permit renewal, and prepare a renewal application for Brightwater's NPDES by July 2015.

Capital Improvements/Project Planning and Delivery

- The division will work to ensure CSO Consent Decree milestones for 2015 are met and future milestones are on track for timely completion.

- WTD will stay focused on succession planning, implementation of new scheduling standards, inclusion of green building and equity/social justice principles in capital projects, cashflow and budget development in support of the 2016 rate, capital project streamlining, and advancement of Lean philosophy and tools.

Finance, Policy and Administration

- WTD Finance will review and consider updates to the Regional Wastewater Services Plan financial policies and coordinate an affordability review of WTD's rates.
- WTD will evaluate opportunities to refinance additional bonds pending favorable interest rates.

Environmental Cleanup and Pollution Control

- The division will collaborate with the Port and City of Seattle to complete a Feasibility Study for East Waterway Superfund cleanup, and update its Sediment Management Plan to address its contributions to sediment contamination near combined sewer overflows (CSOs).

Education, Outreach and Community Services

- The division is gearing up to commemorate the 50th Anniversary of its treatment plants with events, outreach and activities planned to begin in summer 2015.
- WTD will expand partnerships with community-based organizations, schools, non-profits, and others to increase the variety of educational programming and increase accessibility and participation. Staff are also looking forward to completion of the Brightwater Center Field House in 2015.

Continuous Improvement

- Division staff will pursue process improvements through Lean exercises and other approaches to increase efficiency.
- WTD will remain committed to increasing the integration of equity and social justice into community engagement and project development activities and develop approaches to increase environmental compliance during construction.
- The division will make it a priority to ensure comprehensive management of all of WTD's real property assets.
- The Industrial Waste Pretreatment Program will further enhance its customer service in 2015 by conducting an industrial user survey and implementing procedural changes to reduce processing time of applications

Safety and Training

- To maintain a safe, efficient workplace, WTD employees will stay focused on keeping information and resources available, and work toward the goal of eliminated all lost-time work injuries.

6. General Announcements

There were no general announcements to report.

The next full MWPAAC meeting is March 26, 2015, at Mercer Island Community Center